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Comments on the Michigan DNR Living Legacy Program.

Good morning and thank you for the opportunity to offer some thoughts on the topic of the DNR Living Legacy program. My name is Mike Vasievich. I have lived in East Lansing, MI since 1986. My current position is owner of Tessa Systems, LLC., a consulting firm formed in 2006 that provides research and data analyses related to forestry. My professional career included 32 years as a research scientist and project leader for forest economics research for three different USDA Forest Service Experiment Stations. During that time, I participated in various regional and national resource assessments and policy analyses, and served for 6 years as the Branch Chief for the Natural Resource Information System where we developed and implemented the corporate information systems for the National Forests.

I hold both the Master of Forestry and Ph.D. degrees in Forestry Economics from Duke University and have published many scientific and technical articles in the areas of forest management, economics and policy, resource analysis, biomass production, and forestry social and economic analyses.

Over the past several years, Tessa Systems has done several contract projects for the DNR including a statewide social and economic assessment, management opportunities to increase timber investment returns, scoping for a continuous forest inventory and training in forest inventory analysis. I am generally familiar with the DNR forest resource base and inventory systems (Operations Inventory and IFMAP).

Michigan has a rich forestry heritage and abundant forest resources. According to the most recent 2010 statewide inventory, conducted by the USDA Forest Service in collaboration with the Michigan DNR, there are 20 million acres of forestland in Michigan. This is almost 4% more than in 1993 and almost 9% more than in 1980. Private owners now control 12.4 million acres (62.0%). The State and local governments own 4.6 million acres (22.9%); federal agencies have 3.0 million acres (15.0%), most of which are National Forests.

Michigan's forests are highly productive where timber growth substantially exceeds removals on timberland for all ownerships. The Growth/Removals ratio is a common measure of annual timber growth net of mortality divided by annual removals. Values greater than 1 indicate that forests are growing faster than they are harvested or otherwise removed from the productive timberland base. The G/R ratio is 2.0 for all timberlands in Michigan as of 2010. On State-owned lands, the ratio is 1.7. The ratio on private lands is 2.1. And, the ratio on National Forest lands is 4.6. The bottom line is that the area of our forests has been expanding, forests are growing considerably faster than they are being harvested on all ownerships, and timber inventories are increasing.

This forest abundance is the basis for significant new economic development in biomass energy. Several mills that had utilized these products for paper and manufactured board have closed in recent years. Numerous facilities are now being developed to turn small trees into energy sources throughout the State. These facilities are an important focus of the Michigan Economic Development Corporation. They will create economic opportunities and many jobs in the forest products sector and also enhance markets for roundwood and logging residues that are facing declining markets for traditional wood products. Expansion of the wood energy sector will also contribute substantially to meeting the State's Renewable Portfolio Standards. This will also create opportunities to manage forests for more valuable high-quality sawtimber.

I have followed the Michigan DNR's Biodiversity Stewardship Area program, now called the Living Legacy Program, for several years. It has not been easy because much of the process has not seemed very transparent in the past. Simply gaining access to spatial datasets and maps of the proposed areas was difficult.

In January, 2011, the Michigan Forest Products Council asked me to take a look at the extent of protected lands in the State. Five data sources were examined: The Michigan GAP Analysis database; the Conservation and Recreation Lands (CARL) database; the Protected Area Database compiled by the Conservation Biology Institute; The USDA Forest Service National Forest Plans; and the USDA Forest Service Forest Inventory and Analysis Database.

Each of these data sources uses distinct classifications for protected lands ranging from strict protection such as wilderness areas to actively managed lands that are restricted from development. Most of these databases included both public lands in state, local, and federal ownership, and private lands often held in trust for preservation purposes. For the most part, the classification systems were not directly comparable and the different systems had considerable overlap in areas.

The result of this review indicated that there are already substantial areas of protected lands on all ownerships within the State. For example, the CARL database identifies more than a million acres which we classified as protected and another 416,000 acres where management was substantially limited. These areas included various nature preserves, experimental and research areas, wildlife refuges and management areas, historical sites, parks, and other protected areas. Unfortunately, the data available within these databases provide inadequate information to characterize the on-the-ground conditions on these sites. Nevertheless, large areas of the State are already under significant protection.

The Revised Living Legacies Process issued on September 2011 by the DNR at the direction of Director Stokes indicates that the project has taken on a new direction. I hope that the process now includes an appropriate amount of analysis to identify the impacts of this effort on economic and social values across the State.

The Living Legacy project aims to protect and preserve areas representative of 76 natural communities. I think that you would find few who would argue against protection of samples of these natural communities. However, real questions arise as to how many areas for each natural community are needed and how much area should be protected. How many of these natural communities already have suitable representative areas under protection? And, questions arise regarding who should protect these representative areas. If representative areas are already protected on National Forests or on US Fish and Wildlife Service lands, the Nature Conservancy or on DNR lands, does the DNR need to protect additional areas? The question of how much is enough remains unaddressed.

Preservation intended by the Living Legacies program is primarily aimed at eliminating human disturbances, such as harvesting or oil, gas, or mineral development rather than land use conversion for economic development. For the most part, almost ALL lands in public ownership are already protected from irreversible land use conversion. That represents about 7.6 million acres or roughly 38% of the forestland in the State.

Also, considerable areas are already protected by existing regulations or management practices on both State and federal ownerships. National Forest plans, for example, have identified 553 thousand acres (about 20%) that are either strictly protected, or very significantly limited from harvesting on the three National Forests in Michigan. Additional areas on available timberlands are restricted from harvesting due to aesthetic, ecological, or other site-based limitations. And, National Parks and most National Wildlife Refuges are also strictly protected.

On State Forests, many stands are characterized with limiting factors that effectively restrict harvesting and take them out of the available timberland base. Some lands are basically classified as "severely restricted" or dedicated to ecological or habitat values and under highly specialized management guidelines. Although I do not have a specific number of State Forest acres that fall into these categories, various analyses indicate that there are at least hundreds of thousands of acres to more than a million acres that fall into this "*de facto*" protected category. Many of these lands are already effectively protected and out of the available timberland base.

For example, almost one-quarter of State Forests, about 850,000 acres, are classified as lowland forest types. According to DNR experts, only about 30,000 acres of these lowland forests have been harvested in the past 15 years, about 2,000 acres per year or about 0.24 percent. Management policy is effectively protecting most of these lands.

My point is that many acres of DNR and other public ownerships are already under some form of protection from development and restricted from harvesting. Yet, little comprehensive information is available to judge how much of the representative natural communities proposed as living legacy areas are already effectively protected and off the table for active forest management on DNR or other lands. At least, an objective evaluation of the different levels of protection or management restriction on State Forests lands should be conducted.

I offer several suggestions for the DNR team working on the Living Legacy project.

1. Information is needed to estimate the impact of existing and proposed protected areas on the State's capacity to produce timber.
2. Communications on Living Legacy development should include an individual point person within the DNR and an email list for regular updates to anyone interested in this process. I would like to be added to this list if one is developed.
3. Databases, GIS map datasets, and other relevant information should be posted online and regularly updated so that interested parties can better understand the process and the details.
4. Other areas already under protection on private or other public lands should be considered when evaluating areas on DNR lands for possible inclusion. Also, the team should consider how lands with existing management restrictions fit into the Living Legacy program.
5. Assessments and analyses conducted by DNR staff should include appropriate external review prior to moving forward. And, the Living Legacy team should provide responses to review comments as is typically done with scientifically reviewed publications.

Thank you for the opportunity to speak with you today.